AIRMOTIVE ENTERPRISES, INC.

Box 446

Brainerd, Minnesota == 56401



Phone 829=3398

Instruction

Charter Service

Air Ambulance

A & E Maintenance

Weight AND BALANCE

GESSNA 182 WREN

N2067X

Ser. 18256167

ITEM EMPTY Weight ALPHA/600 THETA /400 BendIX-M450 Power Supply

WeigHT 1869,0 5.25 2,00 7,00 7,00 1890,25

ARM 23.7-(80202) 11,5 11.5 11,5 107.0 23,9 3400

MOMENT 60,375 23,0 80,5 749,0 45350,250

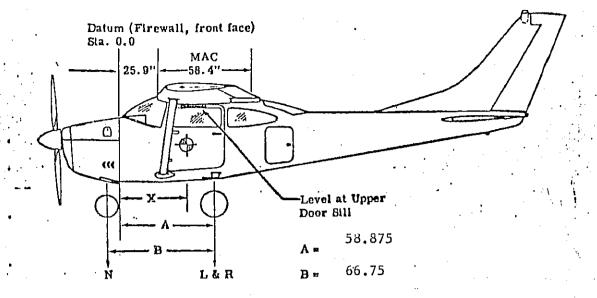
68,009.975

1890.25 New Empty Weight 237 36.0 EMPTY WeigHT C.G. 909,75 Useful LOAD

> Evald S. Elg AI 1202814 Oct. 2, 1973

N2067X

May 10, 1967



Scale Position	Scale Reading	Tare	Symbol	Net Weight
Left Wheel	617	1 .	L	616
Right Wheel	624.5	0	R	624.5
Nose Wheel	651	0	И	(51 1881 5
Aircraft Empty Weig	ht (As Weighed)	w	1891,5	

$$X = ARM = (A) = (N) \times (B)$$

 $X = ARM = (58.875) - (651) \times (66.75) = (22.8)$) inches

WEIGHING PROCEDURE

1. Preparation

- a. Inflate tires to recommended operating pressures.
- b. Remove all wing tank drain plugs to remove all fuel.
- c. Remove oil sump drain plug to drain all oil.
- d. Move all sliding seats to the most forward position. All seat backs should be in the most nearly vertical position.
- e. Put flaps in the fully retracted position.
 f. Place all control surfaces in neutral position.
- Leveling:
 - a. Place scales under each wheel (1000# minimum capacity for scales).
 - Defiale nose tire to center bubble on level (See Diagram).
- 3. Weighing:
 - a. With the airplane level and brakes released, record the weight shown on each scale. Deduct the tare, if any, from each reading.

Measuring:

- a. Obtain measurement "A" by measuring horizontally (along the airplane center line) from a line stretched between the main wheel centers to a plumb bob dropped from the firewall.
- b. Obtain measurement "B" by measuring horizontally and parallel to the airplane center line, from center of nosewheel axle, left side, to a plumb bob dropped from the line between the main wheel centers. Repeat on right side and average the measurements.
- 5. Completing the Form;
 - Uning weights from (3) and measurements from (4) the nirplane weight and C. G. can be determined.
 - b. Obtain licensed empty weight by adding weight and moment of unusable fuel (see other side) to airplane empty weight and moment.

WREN AIRCRAFT CORPORATION Meacham Field P. O. Box 4115 Fort Worth, Texas

MODEL 460 WEIGHT & BALANCE DATA

Wren Serial No. 25 460182 H	Date 10	May 1967 -	-
Cessna Serial No. 18256167		stration No.	N 2067 X
Aircraft Actual Weight Data:			
<u>Item</u>	Weight (lbs)	C.G. Arm (inches)	(Moment (in-lbs)
(1) Aircraft as Weighed*	1891.5	22.8	4 3395.3 75
(2) Fuel Aboard (0 gal.)	0	0	0
(3) Oil Aboard (12 qts.)	22.5	-15.0	- 338.0
(4) Unusable Fuel (5.0 gal.)	30.0	46.0	1,380
	1869.0	23.7 3\$:77	44437 -375 <i>७७</i> , 8 6ጜ
-			

Licensed Empty Wt.

$$= \cdot (1) - (2) - (3) + (4)$$

Useful Load 2800 lbs - 1869 = 931 lbs.

*Item (1) above includes items (2) and (3), aircraft paint (all over stripe), Cessna installed optional equipment (Wt. = 71.5 lbs; Arm = 38.1 inches), and installations shown by Form FAA-337 dated (Wt. 1.5 lbs; Arm = 15.0inches).

Wren	Serial	No	25-460182H	
Cessi	na Seria	al No.	18256167	

Date	10 ^M ay, 1	967		
F.A.A.	Registratio	n No.	N2067X	

NOTE

It is the responsibility of the pilot and airplane owner to insure that the airplane is loaded properly. The empty weight C.G. & useful load are for the airplane as delivered from the Wren factory. Refer to forms FAA-337, dated after when alterations have been made.

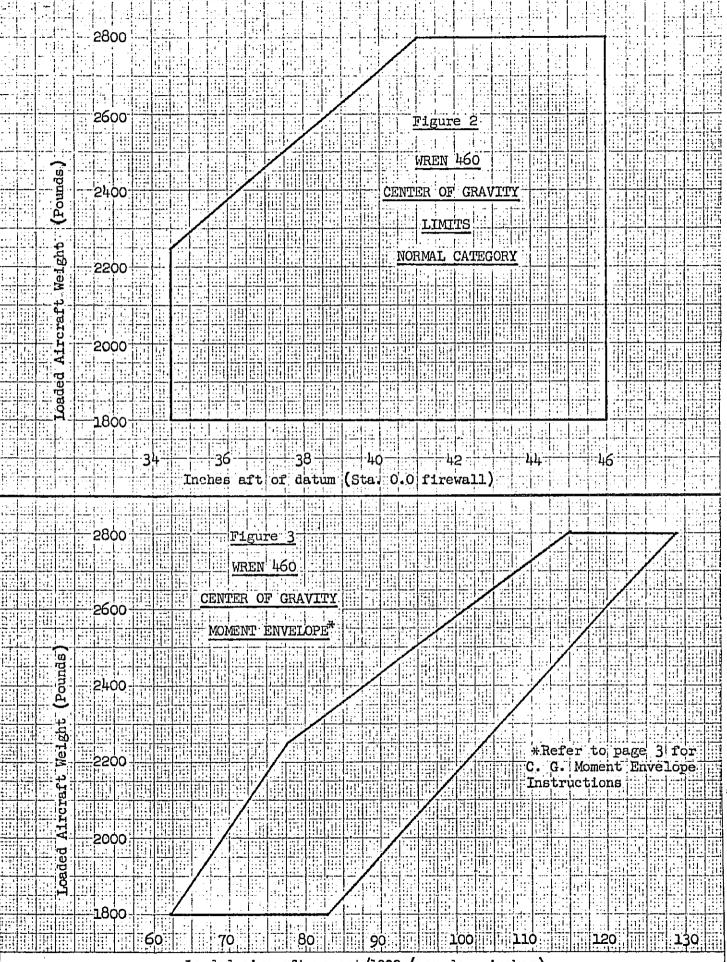
SAMPLE LOADING PROBLEM

	Weight (lbs)	C.G. Arm (inches)	Moment (in-lbs/1,000)
Licensed Empty Weight	1869	35.9 23.7	44.5
0il (12 qts.)	22	-15.0	-0.3
Pilot & Front Passenger	340	36.0	12.2
Usable Fuel 27.5 Gal.	179	48.O	8.6
Rear Seat Passenger	340	71,0	24.1
Baggage	_. 50	97.0	4.8
Total Loaded Airplane	2800	33.5	93.9

Locate this point (2800 lbs.; 33.5) on the C.G. Moment Envelope (Fig. 3). Since the point falls within the envelope the loading meets all balance requirements.

Form 460-1 (sht 2); Issued 6/30/64

C.G. MOMENT ENVELOPE INSTRUCTIONS I To the licensed empty weight add weight of all items to be carried II To licensed empty weight moment add moment of all items to be carried (Ref. Fig. 1). III Locate point determined by I & II and if it falls within the C. G. moment envelope (Fig. 3) the loading is satisfactory.	
I To the licensed empty weight add weight of all items to be carried II To licensed empty weight moment add moment of all items to be carried (Ref. Fig. 1). III Locate point determined by I & II and if it falls within the C. G. moment envelope (Fig. 3)	
of all items to be carried II To licensed empty weight moment add moment of all items to be carried (Ref. Fig. 1). III Locate point determined by I & II and if it falls within the C. G. moment envelope (Fig. 3)	
of all items to be carried (Ref. Fig. 1). III Locate point determined by I & II and if it falls within the C. G. moment envelope (Fig. 3)	
falls within the C. G. moment envelope (Fig. 3)	
480 Figure 1	
Long Range	Panks
440	
- 400	
360 Gal. Max. Standard	
2 320 To Sold Sold Sold Sold Sold Sold Sold Sol	
- 100 - 280	
E 240 35 35 40 320 10 10 10 10 10 10 10	
200 Jan 200 Ja	
160	
Baggage or Aux Seat Passenger (Max Wt 120#)	
. 80-	
	30:
MOMENT/1000 (POUND-INCHES)	
Form 460-1 (sht 3); Issued 6/30/64	



Loaded aircraft moment/1000 (pounds - inches)
Form 460-1 (sht 4); Issued 6/30/64

WREN MODEL 460H EQUIPMENT LIST

Wren Serial No. 25-460182H	Date	14 April, 1965	
0		10	
Cessna Serial No. 18256167	F.A.A.	Registration No. N2067X (S	ta)

Items checked (X) are installed when aircraft leaves Wren factory.

Items with suffix (R) are required items of equipment for FAA certification.

Items with suffix (S) are standard equipment items.

Items with suffix (0) are optional equipment items replacing required or standard items.

Items without suffix are optional equipment.

- Unless otherwise indicated, true values (not net change values) for weight and arm are shown.
- Negative arms are distances forward of datum (Sta. 0.0 firewall, front face.)

8. Positive arms are distances aft of datum.

A separate FAA approval must be obtained if the following items are not installed per applicable Wren drawings & Cessna drawings or accessory kit instructions.

Required, standard, or optional replacements equipment installed and approved by Cessna Factory. Cessna drawing numbers shown when applicable.

<u>ITEM</u>		•	WT.	ARM
NO.	DESCRIPTION		LBS.	INCHES
01-R 02-R	X Engine, Continental X Propeller (HARTZELL)	(0-470-R) (BHC-A2VF3)	430.0 70.3	-17.5
03 - R	X Spinner, Propeller	(DILCOLFFILD)	415	-40.2 -40.2
04-R	X Governor, Propeller (Woodward)	(4750101-61)	4.0	-32.5
05-R	X Alternator, 52 mp. 14-Volt (Cessna)	(0750217)	11.5	- 5.5
06-R	X Regulator, Alternator, 52 Amp. 14-Volt (Cessna)	(0750216)	1.0	- 1.0
07-R 08 - R	X Battery, 12-Volt, 33 Amp. Hr.	(0712605-1)	28.0	116.0
00-R 09-R	X Filter, Carburetor Air	(0750038-1)	1.0	-33.0
10-R	X Heating System, Cabin and Carburetor Air X Oil Cooler, Engine (Continental)		18.0	-16.0
10-0	O Oil Cooler, Engine Non-congealing	(625093)	5.5	-31.5
	(Continental)	(630050)	7.0	-31.5
11 - R	O Wheel, Tire and Tube and Brake Assembly (Two) 6:00 x 6, 6-ply (Main)	•	33.5	59.0
11-0	Wheel, Tire and Tube and Brake Assembly (Two) 8:00 x 6, 6-ply (Main)		43.0	59.0
12-R	O Wheel and Tire Assembly (One)	•		
12-0	5:00 x 5, 6-ply (Nose)	•	8.0	- 7·5
TC-0	X. Wheel and Tire Assembly (One)		11.5	- 8.0
14-R	6:00 x 6, 4-ply (Nose) Altimeter	(0.2021)		_
14-0	X Altimeter (Sensitive)	(S-1314N1)	1.0	16.0
14-0-1	O Altimeter, Sensitive (Feet & Millibars)	(S-1313N1) (S-1432N1)	1.5	15.5
15-R	O Seat Adjustable, Pilot	•	1.5 14.0	15.0 40.0
15-0	X Seat Adjustable, Vertically, Fore and Aft	5	18.0	40.0
	and with Reclining Back, Pilot			40.0

Wren Serial No. 25-460182H

Date 14 April, 1965

Cesspa Serial No. 18256167

F.A.A. Registration No. N2067X (Std)

TTEM	DESCRIPTION		WT. LBS.	ARM -INCHES
16-S ♂ Sea 16-0 X Sea	t, Power Adjustable, Pilot t Adjustable, Co-pilot t Adjustable, Vertically, Fore and Aft with Reclining Back, Co-pilot		24.0 14.0 18.0	40.0 40.0
16-0-1 Ø See 17-5: X See 18-R X Bel 19-S X Bel 20-S X Bel 21-S Ø Pai	t, Power Adjustable, Co-pilot t, Rear t, Safety, Pilot t, Safety, Co-pilot t, Safety, Rear Seat (Two) nt Scheme, Standard Stripes	(s-1060-15) (s-1060-15) (s-1060-14) (0700726)	24.0 25.5 1.0 1.0 2.0 3.0	40.0 80.5 36.0 36.0 71.0
22-R X Gag 23-R X Gag 24-R X Tac	int Scheme, All-over (0700727) Or ge, Cylinder Head Temperature ge, Manifold Pressure chometer, Recording	(0700726) (1213505) (S-1301-N1) (S-1305-N8) (0523118)	19.0 1.0 1.0 1.5	93.5 11.5 15.0 14.0

Required, standard, or optional replacement equipment installed by Wren Factory in accordance with STC SA485SW, dated 1 March, 1965. Wren drawing numbers shown.

ITEM NO.	DESCRIPTION		WT. IBS.	ARM INCHES
13 - R /	Indicator, Stall Warning Audible	(300-200)	1.0	17.5
25-R)	Indicator, Airspeed	(800-101)	1.0	15.5

Optional equipment installed and approved by Cessna Factory. Cessna drawing numbers shown when applicable.

				•	a /	
ITEM NO.		DESCRIPTION		•	WT. IBS.	ARM INCHES
100 101	X	Axles, Heavy Duty (Net Change) Cables, Stainless Steel Control (Net Change)	(144	1003)	· 1.5 Negl.	59.0
102	Χ	Clock, Electric	(s-1	317-N1)	0.5	` 16.5
103	×	Controls, Dual (Wheel, Pedals, and Toe Brakes)		0650)	7.5	13.5
104	X	Corrosion Proofing, Internal			5.0	70.0
105	0	Curtains, Rear Window	(070	0707)	1.5	112.0
106	0	Discharger, Static	(077	0726)	Negl.	
107	Ö	Fairing, Standard Nose Wheel			4.0	- 6.0
108	0	Fairing, Oversize Nose Wheel			4.5	- 6.0
109	0	Fairings, Standard Main Wheel (Set of Two)	•		13.5	61.5

Wren Serial No. 25-460182H

Date 14 April, 1965

Cess	na Se	rial No. 18256167	F.A.A.	Registration :	No. N2067X	(Std)
ITEM					TATO	A 773.4
· NO •		DESCRIPTION			WT. LBS.	ARM INCHES
				•		221011110
110	0	Fairings, Oversize Main Wheel			15.0	63.0
111		(Set of Iwo) Filter, Full-Flow Oil	,	07506061	1. =	, _
112		Fire Extinguisher, Hand Type		0750606) 1400054)	4.5 5.5	- 4.5
		(use with Std. Pilot's Seat)	•	14000947	2.2	35.0
113	0	Fire Extinguisher, Hand Type		•	5.5	29.0
		(use with Manual Vertical				- .
114	•	Adjusting Pilot's Seat)				6
- 		Fire Extinguisher, Hand Type (use with Electric Vertical		•	5.5	67.0
*		Adjusting Pilot's Seat)			•	•
115	0		(S-1311-N1)	1.0	5.5
116	Х	Gage, Outside Air Temperature		S-1322-1)	Negl.	28.5
117	0	Ground Service Plug Receptacle		AN2552-3A)	2.0	- 3.0
118	O	Gyros, Remanufactured Horizontal		C-661001-0101)	16.0	7.5
		and Directional	(c-661002 - 0101)		
119	_	(Includes Engine-Driven Vacuum System Gyros, Remanufactured Horizontal)	•	7.5.0	<u>.</u>
	0	and New 3" Directional			15.0	7.0
		(Includes Engine-Driven Vacuum System	m)			
120	Q	Gyros, New,		G-519A)	13.0	6.5
	_	Horizontal and Directional	(G-520A)	_3	
101		(Includes Engine-Driven Vacuum System				
121	0	Headrests, Front Seats, Two (Install			1.5	47.0
122 123	0	Headrests, Rear Seats, Two (Installed		•	1.5	87.0
124	0	Heating System - Stall Sensor and Pi Hook, Glider Tow-Stowed		0712643)	0.5	26.5
		(Installed Arm Shown)	(0(12042)	0.5	231.0
125	λ	Indicator, Economy Power	(0750609)	1.0	6.0
126	X	Indicator, Rate of Climb		S-1304-N1)	1.0	15.5
127	X	Indicator, Turn and Bank		S-1302-N1)	., 2.0	15.0
128	0	Light, Map		0770725)	0.5	30.0
129 130		Light, Rotating Beacon		1270427)	1.5	253.0
131	0	Lights, Courtesy (Set of Two) Mirror, Rear View		0700615)	Negl.	61.0
132	X	Nose Gear Fork - Net Change	(0700156)	0.5 2.0	16.0
	,,	(use with Item 12-0).			2.0	-, 5•5
133	0	Oil Dilution System	(0750155)	2.0	- 0.5
134	0	Oxygen System, 4-Port		0700728)		/
135	0	Oxygen System, 6-Port		0700728)		
136	0	Priming System, Six-cylinder		0750125)	1.0	~15.0
137	0	Seat Installation - Auxiliary (Includes Seat Belt)	(0711663)	10.0	102.0
138	0	Shelf, Utility - Removable	1	0711682)	iΛ	10F F
139	Õ	Stabilizer Abrasion Boots		0500041)	1.0 1.5	105.5 206.0
140	0	Stretcher Installation, Custom Air		0700073)	٠.,	200.0
	_	(use Actual Installed				
		Weight and Arm Change)				

Wren Serial No. 25-460182H

Date 14 April, 1965

Cessi	na Se	rial No. 18256167	F.A.A.	Registration	No.	N2067X	(Std)
ITEM	•					•	
NO.	•	DESCRIPTION		•		WT.	ARM
	.	DEPOSITE TAOM			:	LBS.	INCHES
141	×	Sun Visors (Two)		(0700122)		3 0	72 6
142		Tow Bar, Aircraft (Stowed)				1.0	33.0
143.		Ventilation System, Rear Seat		(0700315)		2.0	97.0
144 ,	À	Windshield, Tinted (Net Change)		(1200636)		1.0	60.5
146	ŏ			(0700734)		Negl.	
		(Installed Arm Shown)					
204		Electronic Installation - Partial -	Option	. A		5.5	67.0
205	0		Option	. В		1.0	53 . 5
206		Electronic Installation - Partial -	Option	. C		2.5	16.5
207	0	Electronic Installation - Partial -	Option	. ב		0.5	67.0
208	0	Antenna and Cable - Communication (VHF)		•	1.0	53.5
209	6	Antenna and Cable - Dual - Communica	ation (VHF)		1.5	53.5
210	Ô	Antenna and Cable - Navigation (VHF)			1.5	172.0
211		Antenna and Cable - Marker Beacon				0.5	57.5
212	0	Headset and Microphone				1.0	18.0
213		Cabin Speaker		'		1.5	40.0
214	0		-			0.5	18.0
215	_	Audio Amplifier				1.0	11.5
216	0					1.5	10.0
217	. 0		Instls.			0.5	10.0
218	\circ	Cessna ADF 300 (521B)		(0770750)		11.0	20.0
01.0	_	(Includes Loop and Antenna)		··			
219		Cessna Transceiver 300 (524A)				8.0	11.5
220		Cessna Nav-Com 300 (514A)				11.0	11.5
221		Cessna Nav-Com 300 (514R)				11.5	. 11.5
222	0	Cessna H.F. Transceiver 300 (526)			•		
000	1	(Includes Antenna)					
223	0.	Cessna Marker Beacon Receiver 300 (5	502B)	·		2.5	20.0
		(Includes Antenna)			•		·
224		Cessna Transceiver 500 (302G) TSO	*			11.5	53 • 5
225	0				74 (21.0	63.5
226	0	Cessna ADF 500 (318G) TSO		•		22.0	69.5
	_	(Includes Loop and Antenna)					
227	0	Cessna Nav-Omni 500 (319G) TSO (Includes Glide Slope Antenna)	•			20.5	60.5
228	Ó	King KY-95 or KY-95E				9.0	59.5
229	O	King KX-120 with KI-200				14.0	44.0
23Ó	0	King KX-150A or KX-150AE				9.0	11.5
231	Õ	NARCO Mark XII with VOA-4				15.5	48.0
232	0	NARCO Mark XII with VOA-5	•			15.5	48.0
233	0	NARCO Mark XII with VOA-6				14.5	50.5
234	0	NARCO UGR-1A (Includes Glide Slope A	Intenna			9.0	90.0
235	0	NARCO UDI-2 DME		.		18.0	
236	õ	Pantronics H.F. Transceiver DX-10D				19.5	59.0
		(Includes Fixed Wire Antenna)				エフ・ノ	55-5
237	0	Pantronics H.F. Transceiver DX-10D				30.0	78 =
٠,	~	(Includes Reel-out and Fixed Wire An	tennas	,		JU-U	78.5
		· · · · · · · · · · · · · · · · · · ·		′			

Wren Model 460H Equipment List (Cont'd)

Wren Serial No. 25-460182H

_____ Date 14 pril, 1965

Cessna Serial No. 48256167

F.A.A. Registration No. N2067X (Std)

Optional equipment installed by Wren Factory in accordance with STC SA485SW, dated 1 . March, 1965.

<u>ITEM</u>	WT.	ARM
<u>NO.</u> : <u>DESCRIPTION</u>	LBS.	INCHES
145 X Wings, Extended Range (Net Change)	7.0	46.5

Optional equipment installed and approved by Form F.A.A. 337, dated 4-14-65

Installation made by:

DESCRIPTION	WT. LBS.	ARM INCHES
Narco VDI - 4	9.12	11.5
Canairco Beacon	1.7	161.25
Mitchell Attitude Gyro 52D66	2.7	13.0
Mitchell Derectional Gyro 52D 54	3.2	14.0
Mitchell Roll Servo ID 363 - 243R	2.5	53.0
Mitchell Console Amplifier IC 385	2.6	15.0
Mitchell Radio oupler 1 Ic 388	1.0	15.0
Rupert Shoulder Harness Model 82	1.5	36.0

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

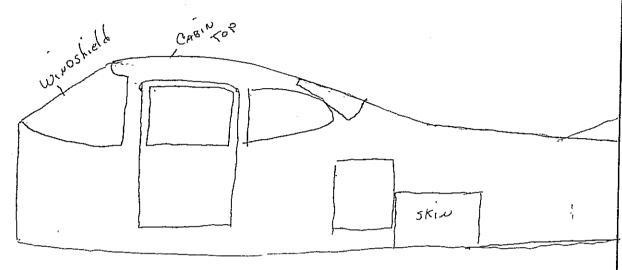
Form Approved 1 Budget Bureau No. 04-R060.1
FOR FAA USE ONLY
OFFICE IDENTIFICATION

INSTRUCTIONS: Print or type all entries. for instructions and disposition of this form.	See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1	(or subsequent revision thereof)

	MAKE	ren/Cessna		MODEL 460/182H							
1. AIRCRAFT	SERIAL NO.	ren/cessna			NATIONALITY AND REGISTRATION MARK						
		5-460182H		•	N 2067X						
· · · · · · · · · · · · · · · · · · ·		on registration certificate)			ADDRESS (As shown on registration certificate)						
2. OWNER		er L. Bissing	er			No. 9th		,			
				Brainiard, Minn.							
	•		3. FO	OR FAA USE ON	LY		••				
						•					
			4.5	**.			•				
		4. UNIT IE	ENTIF	ICATION				5.	ГҮРЕ		
- UNIT		AKE		MODEL		SERIAL	NO.	REPAIR	ALTER-		
		•						REPAIR	ATION		
AIRFRAME		**************************************	:L	المالية الأساسة المالية					· .		
ZIKI KAME		•••••••••••••••••• (As de	2567106	ed in Hem 1 OD	OVE)	***********		x			
					-	1			7.		
POWERPLAN	т										
		:					•				
BDODELLED											
PROPELLER											
	TYPE			- No 1					.004.7		
APPLIANCE	MANUFACTURER										
			CONF	ORMITY STATE							
A.	AGENCY'S NAME	AND ADDRESS	v	B. KIND OF AGENCY			C. CERTIFICATE NO.				
Gar	y Wilson	1.0	1	X U.S. CERTIFICATED MECHANIC			- !				
	2 N. Hocke	r		CERTIFICATED R		A&P 1686515					
	lep. Mo. 64			MANUFACTURE							
D. I certify	y that the repair ar	nd/or alteration made to	o the	the unit(s) identified in item 4 above and described on the reverse or							
attachm	ents hereto have be	en made in accordance urnished herein is true	with	the requireme	nts of Part 4	£3 of the U.S. F	ederal Aviat	ion Regu	lations		
	t the mornation (Britished herein is true		•							
DATE			SIC	SIGNATURE OF AUTHORIZED INDIVIDUAL							
Ma	W1 197	- /									
	- / - / - /	7. APPRI	DVAL	FOR RETURN T	O SERVICE						
Pursuant to the Admini	the authority give	n persons specified belo ral Aviation Agency and	w, th	e unit identifie	d in item 4	was inspected i	n the manne	r prescri	bed by		
l ins	A FLT. STANDARDS	MANUFACTURER	INS	PECTION AUTHORI	ZATION	OTHER (Specify)	;	:			
BY FA	A DESIGNEE	REPAIR STATION	OF	VADIAN DEPARTM TRANSPORT INSP AIRCRAFT							
DATE OF AP	PROVAL OR	CERTIFICATE OR DESIGNATION NO.	SIG	NATURE OF		DINDIVIDUAL					
114: 119:	י .	正1031127	1	Willi	., J	Allen -			į		
		OLETE PREVIOUS EDITIC		o - ULLine		812 34 5	0052-025-	8000 (8320)		

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)



Windsdield, Cabin Top, bottom left center fuselage skin replaced with Cessna factory parts. Aircraft assembled and test flown.

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved Budget Bureau No. 04-R060.1								
FOR FAA USE ONLY								
OFFICE IDENTIFICATION								

INSTRUCT	TIONS: Print or typtions and disposition	oe all entries. See	FAR 4	3.9, FAR 43 Appe	endix B, and .	AC 43.9-1 (or s	ubsequent i	evision th	ereof)	
	MAKE Cessna	1		MODEL 182H						
1. AIRCRAFT	SERIAL NO.	5167			NATIONALIT	Y AND REGIST	RATION MA	ARK		
	NIAME /As shown o	n registration certific	nte)		ADDRESS (A	s shown on regist	ration certifi	icate)		
a Uninep		on registration certific L. Bissinger			1	9th St		,		
2. OWNER	nt. rester	n. Drastuker			(8)	d, Minn				
			3.	FOR FAA USE ON						
			·	:		-				
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	Fort Worth,	Texas /oliz	5	MANUFACTUR	ER •	· <u>2</u> ~ 3 <u></u>	**			
attachn	fy that the repair and nents hereto have be at the information f	een made in accord	ance v	vith-the requirem	ents of Part 4	43 of the U.S. I	described o ederal Avia	n the rev tion Regu	erse or ilations	
DATE				SIGNATURE OF	AUTHORIZED) INDIVIDUAL				
·•	11-5-68	• • •		Piller St	Mesen	Billy مرتبه	Joe Kohr	ıg		
		7.	APPRO	VAL FOR RETURN	TO SERVICE /		, , ,			
Pursuant t	to the authority give histrator of the Fede	en persons specified	belov	v, the unit identif	ied in item 4	was inspected EJECTED	in the manr	er prescr	ibed by	
I I I I I I I I I I I I I I I I I I I	FAA FLT. STANDARDS MANUFACTURER " X INSPECTION AUTHORIZATION OTHER (Specify)							.=		
BY F	AA DESIGNEE	REPAIR STATION		CANADIAN DEPART OF TRANSPORT, IN: OF AIRCRAFT						
	PPROVAL OR	CERTIFICATE OR		SIGNATURE OF	AUTHORIZE	D INDIVIDUAL				
REJECTION	: 11 <u>-5-6</u> 8	DESIGNATION N		Welford	1 destela			1	•	
	∴ 11-5-68	. A & P 47745	1	l Clifford .	a. Salaun	l				

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

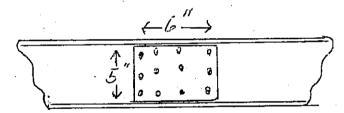
Wren Rt. Wing Removed from Cessna 460H (N2012x Ser. # 18256112), Modification S.T.C. No. S.A. 485 S.W. dated 1-5,65 Wing Repaired at Wren Aircraft Corporation, Meacham Field Wing Not Installed At this Time, To be installed by owner latter on Aircraft N2067X Ser. # 18256167

Rear Spar at Sta 90 Repaired with 2024T .050 Thickness, with doubler on each side

Replaced Wren doubler at Sta 100

Replaced Wren Leading Edge Skin from Sta. 100 to Sta 209

Wren Part Numbers
Doubler # 300-205-18
Leading Edge # 300-209-1



MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. MAKE MODEL Cessna 182H AIRCRAFT SERIAL NO. NATIONALITY AND REGISTRATION MARK 18256167 N2067X NAME (As shown on registration certificate) ADDRESS (As shown on registration certificate) 2. OWNER 621 N. 9th St. Dr. Lester L. Bissinger Brainerd, Minn. 3. FOR FAA USE ONLY 4. UNIT IDENTIFICATION 5. TYPE UNIT MAKE MODEL SERIAL NO. ALTER-REPAIR ATION **AIRFRAME** X 25 **POWERPLANT** PROPELLER TYPE APPLIANCE MANUFACTURER 6. CONFORMITY STATEMENT A. AGENCY'S NAME AND ADDRESS C. CERTIFICATE NO. B. KIND OF AGENCY X U.S. CERTIFICATED MECHANIC Billy Joe Young A & P FOREIGN CERTIFICATED MECHANIC 3140 Milam St. 1804475 Fort Worth, Texas, 76112: CERTIFICATED REPAIR STATION MANUFACTURER D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge. DATE 3 5 SIGNATURE OF AUTHÓRIZED INDIVIDUAL 5 November 1968 Billy Joe Young 7. APPROVAL FOR RETURN TO SERVICE Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Agency and is APPROVED REJECTED OTHER (Specify) FAA FLT. STANDARDS MANUFACTURER INSPECTION AUTHORIZATION INSPECTOR BY CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR FAA DESIGNEE REPAIR STATION OF AIRCRAFT DATE OF APPROVAL OR CERTIFICATE OR SIGNATURĘ OF ĄŲTHORIZED INDIVIDUAL DESIGNATION NO. REJECTION 5 November 1968 Clifford A. Salaun A & P 477457

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Modification new Cessna wing 1/H #0720601-210 aircraft. Wing has been modified in accordance with Wren Aircraft Corp. drawing List MR-460H-1 dated 15 Jan. 1965 and approved under STC No. SA485SW. Wren wing and ULS assembly not installed at this time. To be installed by owner on aircraft N2067X later.

WREN ULS Assembly (Ultra Low Speed System)

WREN Part Numbers

RH Stabilizer RH Elevator

Lone Money's Contail Sc Spar 3 ...

101-301-1 101-302-2

101-100-1

Jee Komm

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved Budget Bureau	
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FOR FAA USE ONLY

OFFICE IDENTIFICATION

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l. Al	RCRAFT	SERIAL NO.					NATIONALITY AND REGISTRATION A							
		182	56.	167			N-	2067X						
		NAME (As sho	ם משכ	n registration certific	:afe)		ADDRESS (A	As shown on reg	istration certif	icate)				
2. 0	WNER													
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	attachm	ents hereto ĥav	e be	en made in accord:	ance v	vith the requirem	ents of Part 4	i3 of the U.S.						
	and tha	t the information	ut no	ırnished herein is 1	rue a	nd correct to the	best of my k	nowledge.						
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Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

N-2067X

March 19, 1968

The following items were replaced with factory replacement.

Complete firewall; lower forward belly skin.

The right and left forward vertical angles on the console were replaced. The console was straightened and reinforced with .032 2024T-3 alclad aluminum.

No weight and balance change.

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved Budget Bureau No. 04-R060.1
FOR FAA USE ONLY
OFFICE IDENTIFICATION

IN for	STRUC instruct	TIONS: Print o	r typ sition	e all entries. of this form	See FAR	43.9,	FAR 43 App	endix B, and	AC 43.9-1 (or subsequent	revision t	hereof)		
	MAKE							MODEL						
		h .	10	Gerena		•	•	460 / 182H						
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				sana 182				N 20	067 X					
		NAME (As sho	o nwo	n registration	certificate)			ADDRESS (A	s shown on re	gistration certitenry Stre	ficate)			
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		North	Sta	r Airpar					Brook	lyn I, N.	Υ.			
3. FOR FAA USE ONLY														
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			- ,		4. UNIT ID	ENTIF	ICATION				5.	TYPE		
											 _	: ALTER-		
-	UNIT		MA	.KE			MODEL		SERIA	AL NO.	REPAIR	ATION		
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POW	ERPLAN	Т		-				٠						
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		tchell Indi	usti	ries, inc	•	FOREIGN CERTIFICATED MECHANIC 1221312								
	Во	ж 610			ú£.	CERTIFICATED REPAIR STATION								
	<u>Мі</u>	neral Wel	ls,	Texas			MANUFACTURE	к		1				
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DATE						SIC	NATURE OF	AUTHORIZED	INDIVIDUAL					
		4-14-67				1	lli (u	hivens:	b.a.	X				
`					7. APPRO)VAL	FOR RETURN T	O SERVICE		7				
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ву		A FLT. STANDARDS		MANUFACTURE	R	INS	PECTION AUTHOR	IZATION	OTHER (Specify)					
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Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

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ADDITIONAL SHEETS ARE ATTACHED

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved Budget Bureau No.	. 04-R060.1
FOR FAA U	JSE ONLY

		(Airfram	e, P	owerplant, Pro	pell	er,	or Applian	ce)	C	OFFIC	E IDENTIFIC	MOITA	_			
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		MAKE	17	DEN / C			MODEL									
1. A	IRCRAFT	SERIAL NO.	WREN/Cessna					460/182								
	•	SERIAL NO.		REN 25-460182 essna 1825616			NATIONALITY AND REGISTRATION MARK 192067X									
		NAME (As sho		n registration certific		ADDRESS (As shown on registration certificate)										
2. 0	WNER	-	North Star Airparks, In					_								
								Brooklyn, New York 1120								
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Lester W. Fleetwood							U.S. CERTIFICAT				A & P 640749IA					
2717 Avenue E Fort Worth, Texas						FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION					- 					
							MANUFACTURER				-4 i					
	attachn	aents hereto hav	e be	d/or alteration ma en made in accorda ernished herein is t	nce y	vith	the requiremen	nts of Part 4	3 of the U	and d	lescribed or ederal Aviat	the reve ion Regu	erse or lations			
DATE						SIC	NATURE OF	AUTHORIZED	INDIVIDU	AL						
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Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

- 8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)
 - 1. Installed Wren Hartzell Beta Control System under STC-692-SW and Wren drawing No. 200-100.
 - 2. Installed Canairco strobe beacon in accordance with manufacturing instructions FAR 43 and FAA advisory circular AC 20-30.
 - Aircraft weighed in closed hangar. See A/C weight and balance data and current equipment list for new CG.